

Method for producing a fluid device, fluid device and analysis apparatus

Abstract

In the case of a method for producing a fluid device with a fluid structure having an active height, a basic wafer is provided, which comprises a supporting substrate, an insulating layer on the supporting substrate and a patterned layer on the supporting substrate, the thickness of the patterned layer determining the active height of the fluid structure. Following this, the fluid structure is produced in the patterned layer of the basic wafer, said fluid structure extending through the semiconductor layer. A transparent wafer is then applied so that the fluid structure is covered. Subsequently, the supporting substrate and the insulating layer are removed from the back so that the fluid structure is exposed at a second surface of the patterned layer. Finally, a second transparent wafer is attached to the exposed second surface of the semiconductor layer so that the fluid structure is covered. The essential parameter of the fluid device, viz. the active height of the fluid structure, need no longer be controlled making use of the etching parameters, but is already determined by the specifications of the starting material, e.g. an SOI wafer. This means that economy-priced fluid devices can be produced with high precision.